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GRANDMOTHER, JOSE' AND SHEP AT HOME

Carrying net, ollas and baskets by courtesy of Southwest Museum. Seed beater after Kroeber. Outdoor granaries after James. Metate, grinding stone, in Edwards' collection.

José

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A Story of the Desert Cahuilla

BY CHARLES LINCOLN EDWARDS, Ph.D.



Los Angeles City School Library

ILLUSTRATIONS BY ELIZABETH M. THOMPSON

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JOSÉ

A Story of the Desert Cahuilla

MISSION CREEK CANYON

José lived in Mission Creek Indian Reservation. A mile below the Reservation is the T-X-K ranch. In the early days of California the rancher did not have time or money to build fences for his cattle. He put his brand, or mark, on the hide of each calf. Then all the cattle were turned out in the mountains together. There was plenty of grass and water. In the fall each rancher could tell his own cattle by the brand. This man, to make his brand T-X-K, well-known, gave his ranch the same name.

About a million years ago, or may be a little longer, a great volcano poured out lava below the site of the T-X-K ranch. The melted rock ran into an old earthquake crack. This remained as a dam, or dyke of basalt. Today this volcanic rock holds back water as far as the top of Mission Creek Canyon. A grassy cienega or swampy land covers part of this underground storage of water.

While the water is not seen one knows it is there by the grass and clumps of mesquites, willows and cottonwoods. Every plant must drink and eat as we have to drink and eat. The plant sends roots down to the water. If it does not find water, the plant dies. The water and simple elements of food are taken in through the roots. In the green leaves it is all made into sugar which may be changed to starch. Plants live on sugar and starch and we take our supply from that which they store.

THE DESERT CAHUILLA

The family of José belonged to the Desert Cahuilla (Ka-we-ah) tribe of Indians. This is part of the Shoshone nation which, in early times, extended all the way from Southern California into Arizona and Nevada. At the present time the Hopi are the only Shoshoneans in Arizona.

Mission Creek Canyon is in the territory of the Serrano, a closely related Shoshonean tribe. When first married the grandfather and grandmother of José had moved to Mission Creek Canyon. Their home among the Cahuilla had been only a few miles to the southward. No matter where an Indian may wander he always remembers and follows the traditions of his own tribe.

When José was three years old his father and mother died. The grandmother raised him. Sometimes the grandmother would tell José stories of the old Indian times and once she said:

"The Cahuilla tribe is divided into the Wild Cat half and the Coyote half. A long, long time ago, longer ago than anyone can remember, a Wild Cat man of the Cahuilla tribe went into the sky to live and he became the sun. A long, long time ago, longer ago than anyone can remember, a Coyote woman of the Cahuilla tribe went into the sky to live and she became the moon. That is the reason why the sun and the moon are in the sky today."

The Cahuilla Indians have always been very proud that the sun and the moon came from their tribe.

THE HOME

The home of the grandmother and José stands near a big cottonwood. This is the plan of their Cahuilla house. Two long strong forked poles, one at each end, hold the ridgepole. A forked pole supports each corner. Some poles placed across and others up and down are bound together by green leaves of agave which is much like the century plant. When a green agave leaf is hammered until all the pulp and juice are squeezed out, only fibers remain. The best rope is made from leaves of agave. Related plants of the same family yield sisal hemp. So these Indians bind the joints of their house framework together with green ropes.

The roof is a thatch of juncus rushes perfectly laid to shed the rain. The side walls are of brush, thatched with rushes, to keep out the cold of winter and the heat of summer. A ramada, or porch, covered with leafy branches, shades the front.

The floor of the house is just dirt. Stepped upon by human feet for many years, it has become packed as hard as stone. The grandmother swept it clean every day. The fire for cooking is

in a pit in the center of the floor. The smoke curls up and out through a hole in the roof.

The grandmother made baskets as the Cahuillas have made them from ancient times. She wrapped a juncus rush around a bundle of tough deer grass. Sometimes she used splints of squawbush stems for wrapping. To the first small ring she added coil upon coil until the foundation was laid. Upon this flat bottom the basket was built up. The color pattern was made by using rushes of different shades. Most were buff. Others were olive, yellow, red and brown. Some of the squaw-bush splints were dyed black in a wash made from the berry stems of the elder.

For the most part the baskets were broader than deep. They were used for the storage of dried seeds and for carrying things. Some of the smaller baskets had the form of a shallow pan with the edge spreading outward. Others were vase-shaped.

The carrying net of the grandmother was made from agave plant fibers. It was like a hammock. A head band was fastened to the end loops of the net. The grandmother's forehead was protected by a cap. With this carrying net on her back the grandmother would bring a large load of wood from the mesquite grove. When there is a baby in a Cahuilla family the carrying net is used as a cradle.

The grandmother wore sandals which she made from the tough fibers of the yucca. Each sandal was held on by a cord passed around the ankle.

The grandmother made ollas (ol'yas) or jars of clay. Some were made with two mouths and a few with even three or four mouths. A pattern of angled lines was painted on some of the jars with yellow ochre which became red when fired. In summer the drinking water was kept cool in one of the largest jars.

In a corner of the house José had a collection of rocks, shells and other things. The most precious specimens were arrowheads, made by Indians of olden times. The Cahuilla arrow is merely a sharp-pointed straight stem of mugwort or of common reed. The most valued arrow-head was made of moss agate. Think of that ancient Indian patiently chipping away with a chunk of chalcedony in one hand and a hard stone in the other. Every stroke had to be accurate. The chips could not be put back.

He chipped until that exquisitely shaped arrow-head was made. José would hold his prized arrow-head to the light. Down in the heart of it he could see the mosslike formation. Many arrow-heads were made of obsidian, which is a volcanic glass. This, like window glass is made mostly of melted quartz. The quartz for obsidian was melted millions of years ago. It flowed from deep within the earth. On the surface it quickly cooled to glass.

HARVESTING AND PREPARING FOOD

Every few days during the harvesting season the grandmother and José gathered dried seeds. They lived mostly on dried seeds. Each had a beater. Cahuilla Indians make a beater by tying a bunch of sticks together at one end for a handle. At the other end the sticks are spread out and held spread by a bow like a tennis racket. The seeds are beaten into a basket.

The grandmother took several baskets so that each kind of seed might be kept separate. They gathered seeds from white sage, black sage, and especially that kind of sage called chia. They liked the seeds of sagebrush, which is not a sage but a sunflower with a sage smell. In addition they harvested the seeds of the nut pine, elder, sumac, quail brush, mustard, sneezeweed and pigweed. The seeds were stored in large outdoor granaries. These were rough cone-shaped baskets placed on a wooden platform.

The grandmother raked out hot stones from the fire pit, placed them in the basket with the seeds and parched the seeds. Then she put the parched seeds on the metate or grinding slab. This was made of stone which had been hollowed by long usage. With her rubbing stone, a piece of rounded granite, she ground the parched seeds into seed flour or pinole. With a brush made of agave fibers the pinole was swept into a basket placed under the end of the metate. From the pinole the grandmother cooked mush and made bread. She was a good cook and knew the taste of each kind of seed. Sometimes wheat or corn flour was added.

Of course these Indians had other things for food. They ground the kernels from wild cherry and manzanita fruit pits into seed flour. This was put in a hole scooped out in the sand, and soaked with water until the bitter flavor was removed. They ate the ripe pods of the mesquite or honey locust.

There are two kinds of mesquite in the desert. One has a long pod like our garden bean. The other has the queerest pod in the desert. Because the pod is coiled like a screw the tree is called the screw-bean mesquite. José, when hungry, went to the basket the grandmother kept filled and ate the honey-sweet mesquite pods as candy.

She also gathered the fruit and juicy stems of prickly pear and other cactus plants. When they visited Andreas Canyon José climbed the fan palm for fruit. These berries were liked although having very little pulp. Yucca and ocotillo flowers were boiled and eaten.

JOSÉ AND SHEP

All through his childhood José and his dog Shep would go on top of the big hill, the largest hill in Mission Creek Canyon, to play among the rocks. When the dog saw a jack rabbit, away he ran, barking and howling, after the wild creature. The dog knew that he never in the world could catch a jack rabbit, yet he could never resist the temptation to chase one. The big jack rabbit loped along, ten or twelve feet at a lope, moving with greatest ease. He looked back over his shoulder at the dog struggling and barking among the bushes. As he flashed over the edge of the hill the jack rabbit seemed to wiggle his big ears at the dog.

Shep came to his master, hanging his head in shame, because he had failed in what he started to do. José said, "That's all right. You're a nice dog." Then Shep cheered up, went to the meadow and caught a gopher. There were hundreds of gophers in their underground homes in the meadow. Shep could dig one out in five minutes at any time. He brought the gopher to his master as if he had done something wonderful. José said, "You're a good old dog." So they played together.

OUTLOOKS

José sat on a great bowlder at the top of the hill. He looked out over the country. It is a wonderful scene from the top of José's hill. To the north and west is San Gorgonio mountain peak. Farther westward, in the same mountain range, San Bernardino peak comes in view. Opposite San Gorgonio stands Mt. San Jacinto. This sheer mass of granite forms the south wall of San



SHEP AND JACK RABBIT

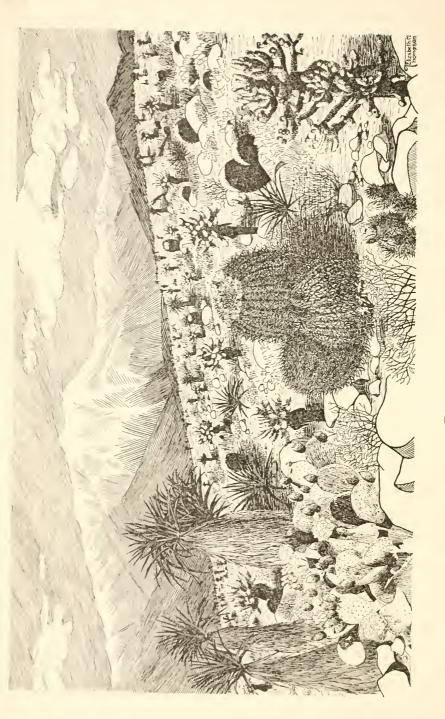
Gorgonio Pass. The winds blow through this pass, in from the ocean and back from the desert, sometimes approaching the force of a hurricane.

These three wonderful mountains rise nearly two miles above the floor of the Colorado Desert. That desert floor, in some places, sinks below the level of the ocean. In winter the tops of these mountains are covered with snow. In the deep canyons the white mantle extends far down the mountain side. Every day the hot desert sun melts the surface of the snow. Every night the cold desert air freezes the snow. In the sunlight the surface of the snow glows and glistens as if made of polished silver or crystal glass. The snow sparkles as if covered with uncounted millions of diamonds, each flashing its rainbow colors in every direction.

DEVIL'S GARDEN AND CACTUS PLANTS

Running out from the base of San Gorgonio mountain is a plateau, higher than the floor of the valley. This is called the Devil's Garden, because it is covered with rough stones and cactus plants, from the many branched cholla (chol'ya) to the great barrel cactus. Some of the cactus spines are so fine it takes a magnifying glass to see them. Barely touch the plant and you will gather enough spines for hours of trouble and pain. The long spines of the barrel cactus are curved and needle-pointed. Some spines of the little pincushion cactus are shaped like fish-hooks. The horrid barbed spines of the cholla pierce the hide of any mammal who runs into them. These hideous instruments of torture sometimes fill the lips of grazing cattle. Often the suffering creatures cannot eat and starve to death. Strangely the wood rat carries cholla branches to guard the opening into his burrow. The cactus wren fearlessly darts in and out among the spines surrounding her nest. Why these gentle animals are so very rarely harmed is a mystery.

The cactus plant is one of the marvels of nature. In ordinary plants, water, taken in through the roots, flows into the green leaves. It becomes warmed into vapor. Leaves breathe in air through a great many small mouths. At the same time water vapor is breathed out. In cactus plants too much water might be lost in the hot dry desert air. To avoid this, cactus leaves have be-



DEVIL'S GARDEN
MT. SAN JACINTO IN BACKGROUND

come greatly reduced. In many species there are only mere traces of leaves or they may be entirely lost.

The green fleshy cactus stems do the work of leaves. They make sugar and starch and store water. The outer leathery skin holds back and saves water. We have seen how the spines form a remarkable defense. These weapons are as fit for tearing and holding as the claws of a cat. They protect the cactus' store of food and water from hungry and thirsty sheep and cattle.

BOWLDERS, SAND DUNES AND RANCHES

Bowlders of granite are spread out in a gigantic fan formation at the mouth of Mission Creek Canyon. The granite masses range from the size of a house to pebbles as small as hen's eggs. The granite has been torn from high mountain walls by cloud-burst floods. The torrent coming down the mountain, with gigantic strength, has hurled the granite masses together. They have been ground on one another, age after age. Finally, as rounded bowlders, they have been cast over the whole floor of San Gorgonio Pass. Beyond the bowlders, farther than one can see, are the unending sand dunes of the Colorado Desert, one of the hottest and driest places in the United States.

Beyond the sand dunes there is a great lake, the Salton Sea. To the south-east of the Salton Sea are the Chocolate Mountains. To the south is Mexico. Between the Salton Sea and Mexico lies the deep rich soil of Imperial Valley. Man, with his mind, his unceasing industry, his courage, in only a generation has made this desert into fertile ranch land. He has led water from the Colorado River through irrigating ditches into the hot dry Colorado Desert. Today this wonderful Imperial Valley is the garden spot of the world. From it, day after day, train-loads of alfalfa, cotton, lettuce, tomatoes, peas, melons, grapefruit, oranges, dates, and figs go to every part of the globe.

TWENTY-NINE PALMS

When José was twelve years old Dr. Porter and his family, from Connecticut, moved to the T-X-K ranch. Tom, Dr. Porter's son, and José were of the same age. Tom had a sister, Ruth, two years younger. Tom, Ruth, José and Shep, made an exploring

MOHAVE DESERT TREE YUCCA FOREST

party, going every day into the desert or the canyons and the mountains.

Once Dr. Porter took them all over to Twenty-nine Palms. They went through what the natives call the "Hole in the Wall." This mountain pass through the San Bernardino mountain range goes from the Coachella Valley, the upper part of the Colorado Desert, to the great Mohave Desert. All the way through the mountain pass they were surrounded by flocks of birds. There were hundreds of birds and nearly all of them were bluebirds. These winter tourists to the desert flashed their lovely feathers in the sunlight and sang their simple spring song from every tree top.

At the end of the pass the view is fascinating. As far as one can see, in every direction, is a magnificent forest of giant tree yuccas. The dagger leaves of the tree yucca point to all sides, ready to stab any enemy who may approach. Rough scaled lizards easily climb in and out among the leaves.

The formation of tree yucca seeds depends entirely upon a certain female moth. Flying at night she gathers a little ball of pollen from the flowers of one tree yucca. In the egg case of the flower of another yucca she lays her own eggs. There she leaves the ball of pollen. The eggs of the yucca flower are fertilized and develop into seeds. The caterpillars of the moth hatch and eat some of the seeds. However enough good seeds are left to supply the desert with new tree yuccas.

Beyond the tree yuccas, in the dim distance, rise those desolate, dry, chocolate-colored desert mountains. They are bathed in an opalescent mist of rose color and azure. Only the desert can place such marvelous colors upon the mountains.

In the beginning a desert road is just a couple of wheel ruts. Some man has an idea that out in the mountains he will find gold, silver, or lead. So he takes his flivver, or his wagon, by easy grades, over the sand. If he finds minerals then all of his friends go. Each follows the same tracks until the wheel ruts get deeper and deeper. They become fifteen to eighteen inches deep. Over this road through the desert you can travel thirty miles an hour in perfect comfort unless, suddenly, you strike a hollow. Then you still travel thirty miles an hour but not in perfect comfort.

The explorers took one of these meandering roads to Twentynine Palms. The first thing Tom and José did was to count the palms. They found big palms and little palms but only twentysix. There had been twenty-nine palms in the old Indian times. Now and then some man comes along with an idiotic sense of what is funny. This vandal touches a lighted match to the thatch of dead, dry palm leaves running eighty feet up the trunk. In a few minutes that wonderful tree, the work of nature through three generations of human beings, has been destroyed. That great sentinel of the desert, pointing the way to water for the weary traveler is gone.

A man from Los Angeles was lost in the desert. He knew a great deal about nature. He trudged along through the sand with the temperature at one hundred twenty degrees. He looked everywhere for a clump of mesquites, cottonwoods, willows, or palms, that he might find water. Not one tree was in sight. Still he pushed on under the broiling sunshine. His lips became swollen and cracked by the heat, his tongue puffed up so that he could scarcely speak. Almost ready to drop in his tracks, suddenly, he came upon a barrel cactus. He cut off the top of the cactus plant. With a club he pounded down into the pulp, until the sap, mostly water, gathered there. From his cup he drank of the sap. He was rescued because he knew that fact of nature, that cactus plants store water. He saved his life where many a weary traveler in the desert had died of thirst with water near.

Back through the palms the party could see San Gorgonio peak, seeming almost as near as when at home. That is the way with those wonderful desert mountains. Rising in the clear air, so high above their surroundings, they sometimes seem nearer and higher, as one goes away from them.

A THRILLING ADVENTURE

A few weeks later Tom and José thought they would have an adventure with a big thrill. All boys long to take part in some feat of daring. They dream of hunting lions, killing bears and finding gold. Tom and José went up Mission Creek Canyon, higher and higher, to the place where the east wall rises straight up six hundred feet. That is because, many ages ago, all of the rock and land to the east of Mission Creek Canyon, as far as the

Rocky Mountains, was pressing westward. The great weight of the Pacific Ocean and all the land to the west was pressing eastward. The pressure acted on, age after age, until finally it became so great that the crust of the earth broke. This break was through a weak section running from end to end of Mission Creek Canyon and farther northward. The east wall was squeezed right up into the air six hundred feet and four or five feet to the north. Today we know that this gigantic earthquake took place. We can match the rock at the top of the cliff with that six hundred feet lower down and four or five feet to the south. This is the place where the former layer of rock broke in the ancient earthquake.

The boys wanted to go over the mountain into the next valley westward in which flows the Whitewater River. As the trail got higher it became steeper. They felt as if they were hanging on by their eye-brows, their teeth, and their finger nails, but they got over.

At this point the Whitewater Valley widens. The spring rains coming in had made a lake. Those same spring floods had torn away a lot of logs from a lumber mill in a pine forest at the top of the mountain. The torrent had carried the logs through the canyon into the lake. They floated out together forming a raft.

Tom and José wanted to swim. They shed their clothes and jumped in, swimming races back and forth from the raft. Tom said, "José, I dare you to swim under the logs." What boy can refuse a dare? José said, "Who's afraid?" He was a wonderful swimmer. With a long dive and strong arm strokes he swam under the logs. When José thought he had made his distance he swam upward until his hands came to the top of the water. Instead of going into the air his hands went up against the logs.

José had already waited a long time for a breath. Before he could think of the danger his mouth opened. Water rushed into his stomach and his lungs. That brought him straight against the fact that his life was in very great peril. If he got out of that trap he would have to keep his courage, think clearly and go straight. There was no time to wander around. Of course he didn't think this all out in words. It just flashed into his mind.

José knew that a log goes straight and that a log has an end. With a hand on each side of the log he pulled himself along with every muscle doing its utmost. It was as if he were going through some horrible nightmare, in which he had miles and miles to go. Every time he pulled himself, with all of his strength, he only went a few inches. The suffocating fear of the nightmare crushed upon him.

His ears, his lungs, his whole body, seemed ready to burst for the need of air which would keep life there. On he pulled with all of his determination. Almost ready to drop to the bottom, suddenly, his hand felt the end of the log. With the last of his strength José pulled himself forward and bobbed up through a hole in the raft.

Tom was greatly alarmed that his friend had not appeared on the other side of the raft. Realizing that José was trapped somewhere but not knowing where, Tom was running from log to log. Suddenly he saw José's head come into the air. In two bounds he was at the side of the Indian boy and pulled him out upon a log.

José seemed dead. He was not breathing. He was unconscious. Tom's father, the doctor, had taught him how to give aid to injured people, how to rescue one from drowning. Soon Tom had José's face downward with his head turned to one side. He pulled the arms of the helpless boy out in front with the hands beyond his head. Tom held José firmly on each side at the lower ribs. He pushed the walls of the chest slowly downward and forward. In about three seconds he snapped his hands away. The elastic walls of the chest quickly shot back. The lungs expanded with an inrush of air. Tom rested for two seconds and then repeated the forced breathing. In this manner, again and again, pure air was driven into José's lungs. At the same time bad air was forced out. Slowly heart and lungs again took up their work. At last José gave a deep sigh. His eyes opened and he smiled at Tom.

They rested on the logs until the sun, setting behind San Bernardino Mountain, warned them that night was coming on and they must get home. José put his arm around Tom's neck. Tom put his arm around José's body, supporting the lad. Together, stumbling over the rocks, they started out upon the trail into the gathering darkness. Each mile seemed endless. Every step up

was harder to make. On they pressed, with all their grit. At last they were over the top and down Mission Creek Canyon. It was late at night when they reached home.

José fell upon his bed into the slumber of exhaustion. In the morning Dr. Porter found the Indian boy gasping for breath. He was choking with a cough. His head burned with fever, the doctor knew that pneumonia had set in and that he, the doctor, would have to fight for the life of the boy.

In some mysterious way the dog Shep knew that some great danger hovered near his master. He took his place just outside of the door, lying there on guard, hour after hour. He did not think about what most dogs think of—something to eat, somebody to play with, rabbits to chase. Thinking only of his master he longed to be with him. The dog would look into the doctor's eyes asking, in a way the doctor understood, if he might not go to his master. Dr. Porter would say, "Not today, Shep."

So the fight went on, day after day. Seven and then eight days slowly dragged by. On the ninth day the life of José was hanging by a thread. On the morning of the tenth day, as the doctor came from the sick room, his face was full of smiles. Shep knew immediately that happiness had come back to the world. Dr. Porter said, "Shep, you may go in to-day."

That dog, not with a loud barking noise but just with a low whine of joy deep in his throat, crept into the sick room. At the bedside Shep put his hand on José's hand. The Indian boy was very weak. He had just passed the crisis of the dreadful disease. Assured that he would live the boy smiled as he looked down at the dog. Patting the dog on the head, José said, "Dear old Shep." The dog and the boy, looking into each other's eyes, understood each other's love.







DOBBS BROS.



